G. R. S. IX-5]

Previous references.

File No 699-9

Serial Nos. 1-14

1929-20

(Eqn)

Later references.

GENERAL AND REVENUE SECRETARIAT

Serial Nos. Inventions

Part B for September 1920.

SUBJECT.

Invention for improvements in transmitters for telephony by marconi's wireless telegraph Company Ltd. Electrical Engineers of Marconi House, Strand England.

(13) To the Secretary, Govt Mines
" Chief Engr
" Secy to the Board for Chemical & Rubber Industry
No G 4755-7D 30.8.20.
Forwarding a copy of specification of the invention
Eqn 6 in Sl 1.

(14) From the Hague Agency
Intg Receipt No 287/20 28.8.20.
Acknowledging receipt of
in Sl 10.

WD 2223—GP1—20,000—11-6-20

34 A/19-20.

G. R. S. III—1] 1919-20

GENERAL AND REVENUE SECRETARIAT.

(G/R.)

NOTES.

File No. 199-19

FILE HEADING.

Invention for "Improvements in transmitters for telephony" by Marconi's Wireless Telegraph Company Ltd., Electrical Engineers, of Marconi House, Strand, London, England.

From Messrs. Remfry & Son, Calcutta.

Letter No. nil Dated 9.4.1920 Received 15.4.1920.

Diary No. 1784 Enclos. 2 Spare Copies. Serial No. /

BRIEF ABSTRACT OF LETTER.

Forward an application together with a Power of Attorney authorising them to act on behalf of the applicant company and also a deed of Assignment in favour of the latter, and advise remittance of Rs 11-8-0 and request permission to file a specification of the invention referred to above.

NOTES AND ORDERS.

The money has been received.

The invention has been assigned in favour of the applicant company by one Henry Joseph Round, Electrical Engineer, for a consideration of 5s.

The* P. R. R. is put up, duly entered. Submitted with the

Vide P.R.R. put up in G.R. file no. 197-19.

17.4.20.

NOTES—First Sheet.

G. R. S. III-2]

1786
1894

General and Revenue Secretariat.

GM File No. 199 of 1919.

Serial No.	
	Usual Draft.
	Issue dcs 17/4/20.
2	From 17/4/20 The Hon'ble Secy. to Govt. Secy: Rt: No. 646 D 2.4.20 Acknowledges the receipt of Rs 10/- refd. to in Sl 1
3	Do The Supdt. of Stamps S. 24132 D 22.4.20 Forwards the Power of attorney & the deed of assignment for being impressed with the allgove Stamps.
4	Do The Secy. to the Board for Chemical Indl. Research S. 24133 D 22.4.20. Forwards the applcn. refd. to in Sl 1. for the opinion of the Board.
5	From The Supdt. of Stamps. Letter no. 418 dated 28/29.4.1920. Returns duly stamped the Power of Attorney and the deed of Assignment referred to in Sl. 3. Submitted with a draft acknowledging MA 3.5.20.
	Issue dcs 3/5/20.

NOTE—Contn. sheet.

G. R. S. III-2]

General and Revenue Secretariat.

G.M. File No. 1894, 1598 of 1919.

Serial No.	
	To
6	The Supdt: of Stamps S. 25535 of 7.8.20. Acknowledges the receipt of the power of attorney refd: to in #5
	From
7	The Secy to the Board for Chemical and Industrial Research and Scientific Advice Letter no 51 of 26.7.1920. States with reference to #4, that leave may be granted for filing the specification of the invention. The expert opinion is favourable. Submitted with the usual drafts. For approval 28.7.20 (Sd) 2nd Member 28/7/20 627-282 29.7.20 Draft approved Reed 30.7.20 Issue 31/7/20.
8	To. Messrs Remfrey & Son of Calcutta. G. 3078 dt 7/8/20. Authorises the filing of the specification of an invention for "Improvements in transmitters for telephony" by the Marconi's Wireless Telegraph Co. Ltd of London, Electrical Engineers.

NOTE—Contn. sheet.

[G. R. S. III-2]

2946 1598 2946

General and Revenue Secretariat.

G M File No. 199 of 19 19

Serial No.	
9.	To, Messrs. Remfrey & Son of Calcutta, G. 3079/one dt. 7/8/20. Forwards a Copy of the G.O No. G.3078 dated 7/8/20, authorising the Marconi's Wireless Telegraph Company Ltd to file a Specification of an invention referred to in Sl. 8.
	From
10	Messrs Remfrey & Son. Calcutta Letter dt 17.8.1920. Forwards 4 copies of the specification and the order granting leave to file the specification and advises Remittance of Rs 30/- towards the filing fees thereof and request the usual certificate may be granted Submitted with the Treasury Remittance Ref entered Rs G.O's require the certificate to be filed - Submitted with the usual drafts
	23.8.20
	Issue 24/8/20.
11	To the Compiler, Mysore Gazette G. 4758 dt 30. 8. 1920 Notifies the filing of the Specification of the invention Ref'd: to in Sl 1
12	To Messrs Remfrey & Son G. 4754 dt 30. 8. 20 Forwards a copy of the notification for being sent to the party Concerned

NOTE—Contn. sheet

2946

G. R. S. III-2]

General and Revenue Secretariat.

G.M. File No. 199 of 1919.

CHIEF SECRETARIAT.
IV
MINOR Depts:
4 SEP 1920.

Serial No.	
13	To The Superintendent Govt Museum " Chief Engineer " Secy to the Bd of Chemical Industry Madras G. 4756-7 dt 30.8.20. Forwards a copy of the specification of the invention referred to in P.C.
14	From The Assistant Secretary Letter No. 289 dated 28th August 1920. Acknowledges the receipt of No 30 referred to in P.C.

NOTE—Contn. sheet.

DIARY NO. 1782

REGISTERED.

Jm 19 1919-19-1

To

THE ~~CONTROLLER OF PATENTS.~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
PATENT & TRADE-MARK ATTORNEYS,
CALCUTTA.

Ch 22/4/20M

27913

SECRETARIAT. IV Gen. & R. Depts. 15 APR 1920

Dated CALCUTTA, the 9th April 1920.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

re MARCONI'S WIRELESS TEL:CO.LD. (MYSORE)

(Brit. *No.* 10532/19 *dated* 25/4/19.)

We have the honour to forward herewith an Application of MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED, Electrical Engineers, of Marconi House, Strand, London, England, for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulation, 1894, in respect of an Invention for "IMPROVEMENTS IN TRANSMITTERS FOR TELEPHONY", & solicit the favour of your submitting the same to H.H.the Dewan.

A Deed of Assignment from Henry Joseph Round, in favor of the Applicant Company (consideration £0-5-0) and a Power of Attorney in our favour under which we are acting are also enclosed and we solicit the favour of your having such Assignment stamped -/8/- and Power of Attorney Re.1/- respectively-

A Post Office Order for Rs.11/8/- is also sent herewith.

The corresponding British Patent No. 10532/19 dated 25th April 1919.

We have the honour to be,
Sir,
Your very obedient servants,

Enclos:-
Appln.
P/A-
Asst.

By P.O.O:-
Rs.11/8/-.

MYSORE APPLICATION.

I.M.B.

P/O (Genl.) 1,000—7-6-18 [4-2-14—17-3-11].

No. 1532/19

APPLICATION

TO THE DEWAN OF MYSORE,

The application of Marconi's Wireless Telegraph Company, Limited, Electrical Engineers, of Marconi House, Strand, London, England, for leave to file a specification under Part I of the Mysore Inventions and Designs Regulations 1894.

1. The applicants are in possession of an invention for "Improvements in transmitters for telephony"; they are the assignees of Henry Joseph Round, Electrical Engineer, of 9, Woodberry Crescent, Muswell Hill, London, England; and to the best of their information and belief, the invention is new within the meaning of Part I of the Inventions and Designs Regulation, 1894, and no circumstance exists which, if the applicants are authorised to file a specification and file it in accordance with that Part, will disentitle them to an Exclusive Privilege thereunder in respect of the invention.

The applicants have applied for a patent in the United Kingdom in respect of this invention, No.10532, dated the 25th April 1919, see Illustrated Official Journal (Patents) No.1581, page 500. Complete specification filed 28th October 1919 (not yet accepted).

The applicants have not applied for a patent in British India in respect of this invention.

2. The following is a description of the invention:-

This invention relates to improvements in telephone transmitters of the type employing thermionic generators, and its object is to provide an arrangement whereby the generation of the continuous waves upon which the sound vibrations are impressed is controlled by the voice.

It is well known that the necessity for starting these continuous waves when it is desired to speak and for stopping them when it is desired to listen is an impediment to free conversation as some switching device is usually required.

According to this invention, means are provided whereby the voice itself causes both direct and alternating current, to be fed to a thermionic generator, the direct current, starting with the voice and stopping with the voice, causes continuous waves to be generated while the alternating current causes the amplitude of these waves to be varied.

Preferably there is connected to the generator a large condenser connected through a rectifier to a transformer in the microphone circuit so that any vibrations of the current in this circuit give the condenser a charge which leaks rapidly away when the vibrations cease. The microphone is also connected to the primary of another transformer, usually in series with the large condenser and with a smaller one which forms part of the oscillatory circuit.

This invention is illustrated by the accompanying drawing which shows it as applied to wireless telephony.

In figure 1 M is a microphone connected in series with a battery B and the primaries of two transformers T1 and T2. The secondary of T1 is connected through a

rectifying valve R to a condenser C one side of which is connected to the filament of a thermionic generator V while the other side is connected through the secondary of T2 to the anode of the generator V connected to an aerial A. It will be seen that since there is no source of potential such as the usual battery in the anode filament circuit of V there will be no generation of oscillations by V until speech is commenced when direct current will be fed to the anode filament circuit from the charge in condenser C, due to the transformer T1 and the rectifier R. The valve will then generate continuous waves the amplitude of which will be varied according to the speech by the alternating currents fed to the valve by the transformer T2 and the envelope of the oscillations will correspond to the alternating current wave and the speech will be reproduced at the receiving end without distortion.

If the windings of T1 and T2 are such that a fairly large part of the energy goes to the production of the direct current and only a smaller part to the production of the alternating current, a rapid rise of direct current potential is obtained on the condenser as soon as speech starts.

In order, however, to prevent this potential from rising to more than a definite value, a limiting device may be employed which by limiting the potential on C speeds up the dying away when the speech stops, as shown in figure 2, where rectifier valve R1 and battery B1 represent the limiting device.

In this arrangement also is shown the alternating current produced by the voice as acting on the grid of

the generating valve V and the resulting oscillations are then magnified by the valve circuit V2 to the antenna A.

These two diagrams are shown merely as illustrations of the invention which is not limited to these circuits in particular.

The continuous waves may be varied by the voice in any of the well known methods.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:-

1. In a telephone transmitter, the combination with a thermionic generator of means whereby the voice causes direct current to be supplied to the generator through the agency of a rectifier.

2. In a telephone transmitter, the combination with a thermionic generator of means whereby the voice causes direct current to be supplied to the generator through the agency of a rectifier and means for varying the generated high frequency current by the voice simultaneously.

3. In a telephone transmitter having the features covered by claims 1 and 2, the employment of a limiting valve in order to reduce the duration of the time during which transient conditions obtain.

4. Telephone transmitters substantially as described.

3. The applicants, therefore, apply for leave to file a specification of the Invention pursuant to Part I of the Inventions and Designs Regulation, 1894.

The Common Seal of Marconi's Wireless Telegraph Company Limited was hereto affixed in the presence of

Directors.

Secretary.

We, the applicants above named, do declare that the facts stated in this application are true to our knowledge, except as to matters stated on information and belief, and as to those matters, we believe them to be true.

Dated this 10th day of February 1920

The Common Seal of Marconi's Wireless Telegraph Company Limited was hereto affixed in the presence of

Directors.

Secretary.

Bangalore
105329

Fig. 1.

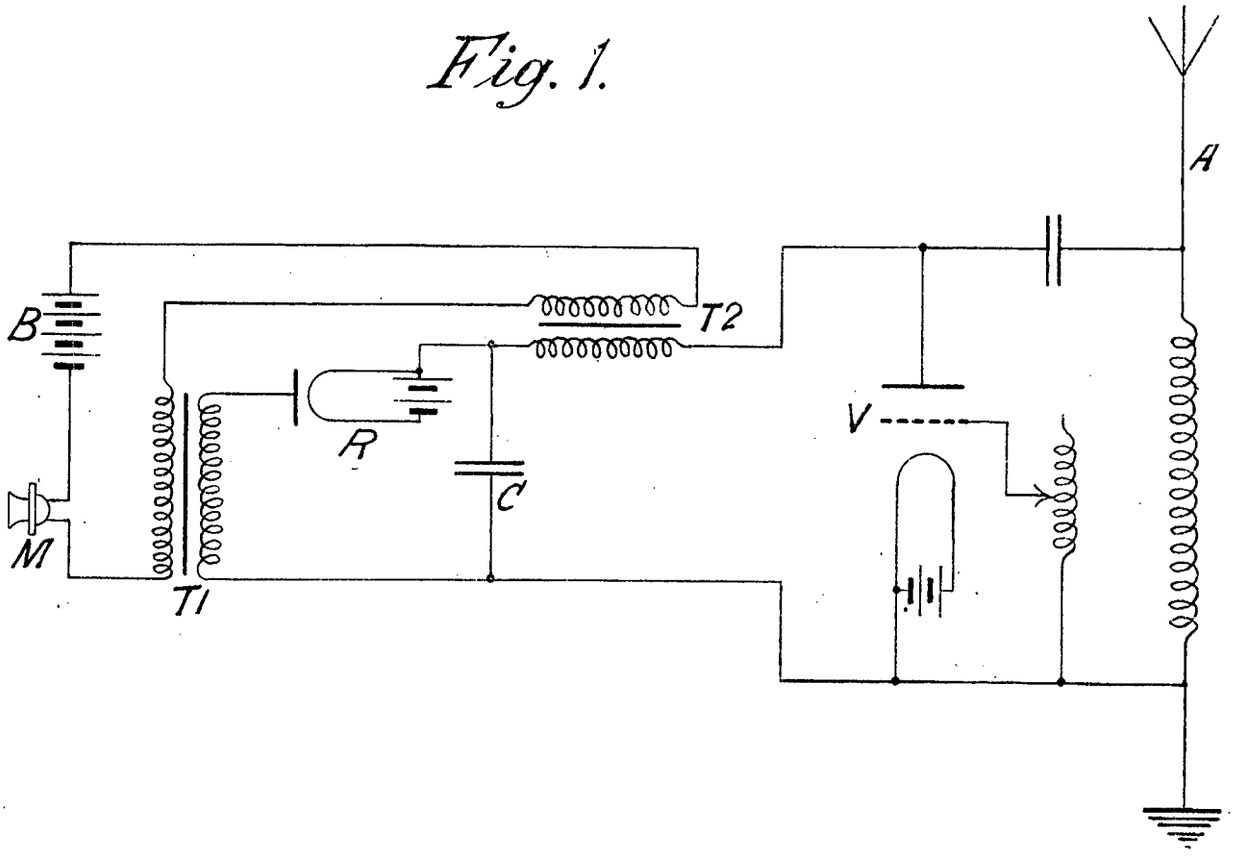
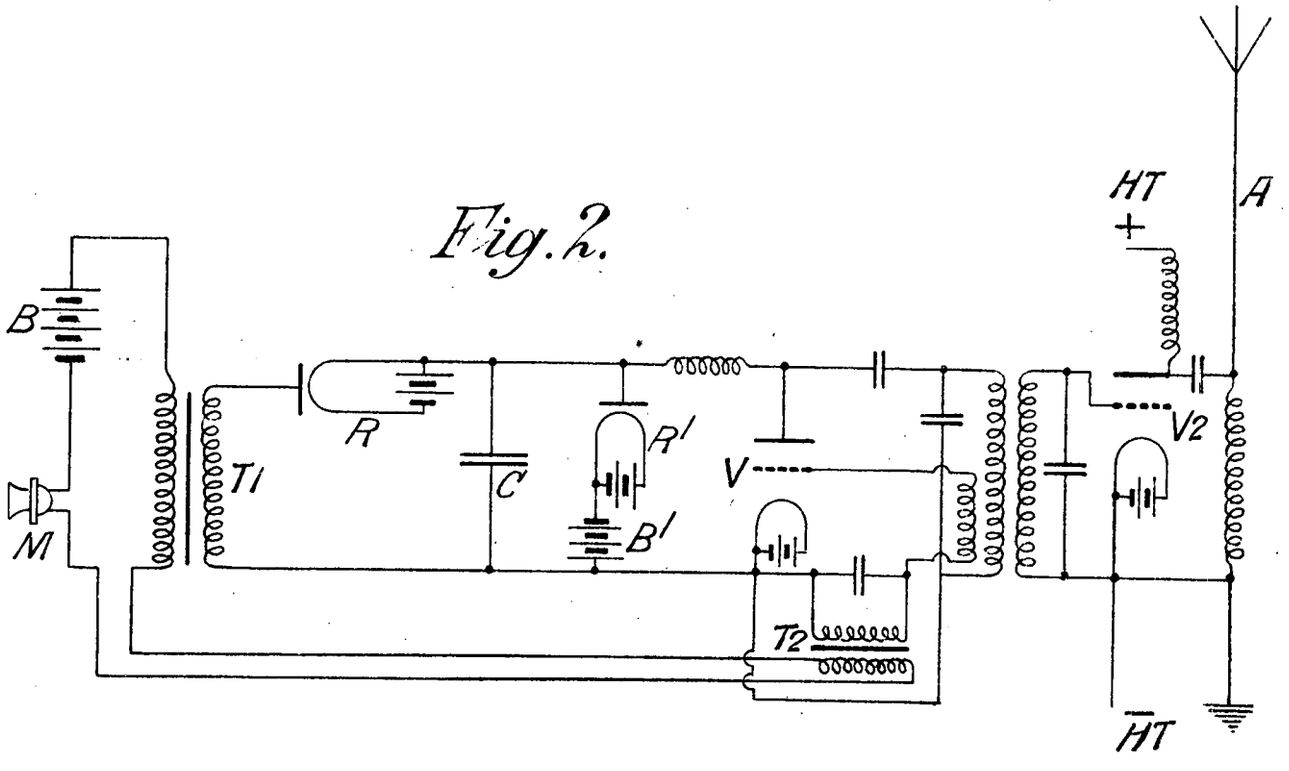


Fig. 2.



803

Mysore 1933 14

GOVERNMENT OF MYSORE 29 AP 20 ANNAS

ASSIGNMENT

I, HENRY JOSEPH ROUND, Electrical Engineer, of 9, Woodberry Crescent, Muswell Hill, London, England, do hereby declare that I am the inventor of an invention entitled "Improvements in transmitters for "telephony", and that in consideration of the sum of Five shillings in hand paid to me, I do hereby assign all my right, title and interest of and in the said invention so far as the state of Mysore is concerned, to Marconi's Wireless Telegraph Company, Limited, Electrical Engineers, of Marconi House, Strand, London, England, with full power to apply for and obtain letters patent for the same in the said state in their own name.

Dated 23rd January 1920

Witnesses:-

A Benjamin

J Malan

Henry Joseph Round

POWER OF ATTORNEY.

In the matter of the Invention and Designs Regulation, 1894, of the Government of Mysore, and in the matter of Marconi's Wireless Telegraph Company, Limited, Electrical Engineers, of Marconi House, Strand, London, England, Assignees of inventor.

We, the above named, Marconi's Wireless Telegraph Company, Limited, do hereby retain, constitute and appoint the Partners or Partner of the Firm of REMFRY & SON, Solicitors & Patent Agents, of Calcutta, British India as our agents and attorneys, to apply for and obtain from the Government of Mysore and keep in force an exclusive privilege or letters patent for "Improvements in "transmitters for telephony", and we authorise them to sign our name to such papers and writings, and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

Dated this 10th day of January 1920.

The Common Seal of Marconi's Wireless Telegraph Company, Limited, was hereto affixed in the presence of:-

Directors

Secretary

NOTE.—The following certificate must be signed in all cases. If the Bill bears date within the 15th of the month, the word "current" may be changed to "last." The Treasury Officer shall refuse to encash a bill unless the proper certificate is signed.

I certify that my Detailed Contingent Bill for all contingent charges drawn by me prior to the 1st of the current month has been forwarded on with all necessary vouchers to the Head of my Department for countersignature and transmission to the Comptroller of Mysore.

The ...rsing Officer.

COUPON. The remitter may write here any communication to the payee.

Rs. 71 - 8 — re The Singer Mfg. Co. (Mysore). Inv No. 3982 Dt. 6/11/18. re The Singer Mfg. Co. (do) Inv No. 4040 Dt. 28/11/18. re The Marconi Wireless Tel. Remitter. Bill No. 10532/19. 25/4/19. (as per our 3 letters of date 9/4/20).

Rupees 14.4.20. (Rupees Seventy one and annas eight only)

SECRETARIAT ACCT. OFFICE 14 APR 1920

GPB—2,000—17-1,16

Finl. 22] ABSTRACT CONTINGENT BILL.

Note.—If this Bill is headed with any other month than that in which it is presented for payment, or if the certificate overleaf regarding submission of detailed Bills is not signed the Treasury Officer must return it for correction or for the requisite certificate.

Government of Mysore	Bill for Contingent Charges of	Month of
Head of Service		Voucher No.

Nos. of Sub-Vouchers	Description of Charge and date of authority (where special sanction is necessary)	* Rs.	a.	p.	Rs.	a.

The total of this Bill must be entered in both words and figures

In words Rupees ...

* This column should, when charges are described, exhibit the component parts of the detailed head. The total of each detailed head will be entered in the next column.

N. B.—The Treasury Officer will make payments on this form as often as required, but the drawer should be careful to include in the Detailed Contingent Bill of a month only the amount of all abstracts encashed at the Treasury during the month

Dated Received Contents.

The 191 Drawing Officer.

4.2m. 193-19-2

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.

1. No. 246
2. Date of Remittance. 21 April 1920
3. From whom received. Messrs. Remfry & Co., Calcutta.
4. Date of receipt of amount in the General and Revenue Secretariat. 14-4-20
5. On what account. Applⁿ fee for order No. 30 of 1920 by Marconi's Wireless Telegraph Co. London.
6. Amount (in figures and words). Rs. 10/- Rupees Ten only.
7. The head to which it should be credited.

(To be filled in by the Treasury.)

D. Subbarayappa.
For Chief Secretary to Government,
~~General Department.~~

The above amount has been duly received and credited in the Treasury on this date.

Date 21-4-20

W. Thompson

Hd. Acctt. *Treasurer.* *Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

G. R. S. VI—s.v/14]

DRAFT.

SUBJECT.....

.....

.....

Section. for
File No. 199-19
Serial No. 3

Diary No. of letter replied to..1782

G/2432 one & half

GENERAL AND REVENUE SECRETARIAT
( )
, *the* ....*191* .

To

The Superintendent
of Stamps
in Mysore.

Date of issue..... 22/4

Signed by..... Mr Dcg

Has the honor to forward herewith a Power of Attorney executed by Marconi's Wireless Telegraph Company Ltd Electrical Engineers London constituting Messrs Remfry & Son, Calcutta as Agents in respect of ~~his~~ their invention for "Improvements in transmitters for telephony" and also a deed of Assignment executed by Henry Joseph Round in favour of the above Company and to request that the same may be impressed with the Mysore General Stamp of the value of Rupee One and annas eight respectively, also herewith forwarded, and the Power and the deed returned to this office.

By Order,

Dcg
17/4/20.

For Chief Secretary to Government.

17-4-20

G. R. S. VI.—1-v/16]

1914

DRAFT.

Draft.

SUBJECT.....

.....

.....

Section. Y-In
File No. 199-19
Serial No. 4

Diary No. of letter replied to.....1786.....

No. G 2413 3 Secs

To

The Secretary to the
Board for Chemical and Industrial
Research and Scientific advice.

GENERAL AND REVENUE SECRETARIAT,

( )

, *the*.....*191*

Has the honor to forward herewith the opinion of the Board, for ~~report~~ under Sec. 6, Cl. (2) of the Mysore Inventions and Designs Regulation, XI of 1894, an application for leave to file a specification of an invention for "Improvements in transmitters for telephony" by Marconi's Wireless Telegraph Company Ltd., Electrical Engineers, of Marconi House, Strand, London, England.

Date of issue..... 22/4.....

Signed by.....

By Order,

Secs
17/4/20.

For Chief Secretary to Government.

17.4.20.

List of enclosures.

Copied by.....

Examined by.....

WD 02695 - GPB— 1 000—2-3-18

WD A 0994—GPB—100—6-9-17

Stamp 38]

DIARY NO. 1894

No. 418
Enc: Nil.

OFFICE OF THE SUPERINTENDENT OF STAMPS IN MYSORE.

Bangalore, Dated 28 April 1920

SECTION
FILE NO
SERIAL NO

Pm. 199-19-3

FROM

M. Srinivasamurthi ESQ.,

Superintendent of Stamps in Mysore.

29489
CHIEF SECRETARIAT.
IV
To
MINOR Depts.
30 APR 1920

TO

C. S. Balasundaram Jr. ESQ., B. A.,
Chief Secretary to the Government
of Mysore, Bangalore

SIR,

I have the honor to forward herewith duly stamped the Power of attorney and the Deed of assignment, received with your No: G. 24132 G. M. 199-19-3, dated 22nd April 1920, and to request the favor of an acknowledgment.

I have the honor to be,
Sir,
Your most obedient Servant,

M. Srinivasamurthi

Superintendent of Stamps
in Mysore.

draft.

G. R. S. VI—G/32]

SUBJECT..... W/S .....

.....

.....

Diary No. of letter replied to.....18634.....

GENERAL AND REVENUE SECRETARIAT
( )
, *the* 191 .

Date of issue.....7/5.....

Signed by.....W Secs.....

Section G.M.
File No. 199-19.
Serial No. 6

No. G 253-35

To

The Superintendent of Stamps
in Mysore.

Sir,

I am directed to acknowledge the receipt of the Power of Attorney and the deed of Assignment duly stamped and forwarded with your letter no. 418 dated 28th/29th April 1920.

I have &c.

Secs
31/5/20.
for Chief Secy. to Govt

over.

3-5-20

GOI copy
5/5/20.

Board for Chemical and Industrial Research
and Scientific Advice.

2833 Bangalore, Dated...26th July 1920. 1598

No. 51 att: specification.

From

S. G. SASTRY, Esq., B.A., M.Sc., F.C.S.,
Secretary, Board for Chemical and Industrial Research
and Scientific Advice, Bangalore.

15 -19
Section
File No.
Serial
199-19

Chief Secretariat
IV
Minor Depts
27 JUL 1920

To R&I

C.S. Balasundaram Iyer, Esq., B.A.,
Chief Secretary to the Government of
His Highness the Maharaja of Mysore,
Bangalore.

Sir,

Refce:- G. 24133/G.M.199-19-4 dated the
22nd April 1920.

With reference to the above, I am directed to state that leave may be granted to file a specification of an invention for "Improvements in transmitters for telephony" by Marconies Wireless Telegraphy Company Ltd., Electrical Engineers of Marconi House, Strand London, England.

I have the honour to be,

S i r,

Your most obedient servant,

Secretary.

2 graphs

£3078

No. 199 19-8

G. R. S.VI—s.-v/21]

Government of Mysore.

GENERAL DEPARTMENT.

Register No. 34 ..... of 1919-20

Bangalore, the 7/8/ *19* 20

WHEREAS an application, dated the 10th day of February 1920 and received on the 15th April 1920, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by The Marconi's Wireless Telegraph Company Limited., Electrical Engineers, of Marconi House, Strand London, England, Assignees of Mr Henry Joseph Round, Electrical Engineer of 9 woodberry Crescent, Muswell Hill. London. England.
(hereinafter referred to as "the applicant") for leave to file a specification of an invention for "Improvements in transmitters for telephony"

.....

.....

.....

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

Rec 30.7.20

28/7/20

For Chief Secretary to the Govt. of Mysore,
~~*General Department.*~~

28/7/20.

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the Twenty third day of August 1920.

For chief Secretary to the Govt. of Mysore,
~~*General Department.*~~

9/4/16

(*Section 8 of the Inventions and Designs Regulation, 1894.*)

8. (1) If within six months from the date of an order under Section 6, Sub-Section (1), or within such further time, not exceeding three months, as the Government of Mysore, in its discretion, may, on cause shown to its satisfaction and on payment of the fee prescribed in that behalf in the fourth schedule, see fit to allow, the applicant causes a specification of his invention to be filed in manner by this Part required, and the fee prescribed in the fourth schedule in respect of the filing of the specification to be paid, the applicant shall, subject to the other provisions of this Part, be entitled to the exclusive privilege of making, selling and using the invention in the Territories of Mysore, and of authorizing others so to do, for a term of fourteen years from the date of the filing of the specification.

(2) But an exclusive privilege in respect of an invention of a new manufacture shall, notwithstanding anything in Sub-Section (1), cease, if the inventor fails to pay, within the time limited in that behalf by the fourth schedule, any fee prescribed in that schedule in respect of the continuance of the privilege.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, an inventor fails to pay any such fee within the time so limited, he may apply to the Government of Mysore for an enlargement of the time for making the payment.

(4) Thereupon the Government of Mysore may enlarge the time accordingly, on payment of the fee prescribed in that behalf in the fourth schedule, and subject to the following conditions, namely :—

(*a*) the time for making a payment shall not in any case be enlarged for more than three months ; and

(*b*) if any suit is instituted in respect of an infringement of the exclusive privilege committed after a failure to make a payment within the time limited for the making thereof and before the enlargement of that time, the Court disposing of the suit may, if it thinks fit, refuse to award or give any damages in respect of the infringement.

W D 02300—GPB - 500—24-11-16

2 Drafts

G. R. S. VI—s-v/13] 2117 **DRAFT.**

SUBJECT.....

.....

.....

Section. f.m
File No. 199-
Serial No. 9

No. 3079 m

Diary No. of letter replied to 1598

To

Messrs Remfrey and Son
Patent and Trade Mark Attorneys.
.....
Calcutta.

GENERAL AND REVENUE SECRETARIAT,

( )

, *the*.....191 ..

GENTLEMEN,

With reference to your letter No.....

dated the 9th April 1920

I am directed to forward herewith G. O.

Date of issue 7/8

No. G. 3078 / G. M. dated the 7/8

Signed by [signature]

191 , authorizing The Marconi's Wireless Telegraph Company, Ltd; Electrical Engineers of Marconi House, Strand, London, England

to file a specification of an invention for

"Improvements in transmitters for Telephony"

.....

Recd 30.7.20

and to request that the fact may be communicated to the party concerned.

I have, etc.

28/7/20.

for Secretary to Government.

28/7/20

DIARY NO: 2946.

-19

Section: fm 1919-19-70

P/E No.

Serial No:

REGISTERED.

To THE ~~CONTROLLER OF PATENTS,~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ HEND. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,

PATENT & TRADE-MARK ATTORNEYS,

CALCUTTA.

Dated CALCUTTA, the 17th August 1920.

CHIEF SECRETARIAT: IV MINOR Depts: 21 AUG 1920

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

Sir,

re MARCONI'S WIRELESS TEL:CO.LD. (MYSORE)
No. 34/19-20 dated -
(Brit. No. 10532/19 dated 25/4/19.)

Pursuant to the Order granting leave in this matter dated 7th August 1920, Register No. 34 of 1919-20, we have the honour to forward herewith 4 copies of the Specification of MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED, Electrical Engineers of Marconi House, Strand, London, England, in respect of their Invention for "IMPROVEMENTS IN TRANSMITTERS FOR TELEGRAPHY".

The abovementioned Order is enclosed and we solicit the favour of your filling in the Certificate at foot thereof and having same signed.

A Post Office Order for Rs.30/- is sent today.

We have the honour to name our Office in Calcutta as address for service under the Act.

We have the honour to be,
Sir,
Your very obedient servants,

Remfry & Son

Enclos:-
4 Specns.
Order.

By P.O.O:-
Rs.30/-/-.

I.M.B.

P/O (Genl.) 1,000—8-6-20 [7-6-18—4-2-14—17-3-11].

10532

1+3 Kuice

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that we, Marconi's Wireless Telegraph Company, Limited, Electrical Engineers, of Marconi House, Strand, London, England, are in possession of an invention for "Improvements in transmitters for "telephony", and we, the said, Marconi's Wireless Telegraph Company, Limited, do hereby declare the nature of the said invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement thereof, that is to say:-

This invention relates to improvements in telephone transmitters of the type employing thermionic generators, and its object is to provide an arrangement whereby the generation of the continuous waves upon which the sound vibrations are impressed is controlled by the voice.

It is well known that the necessity for starting these continuous waves when it is desired to speak and for stopping them when it is desired to listen is an impediment to free conversation as some switching device is usually required.

According to this invention, means are provided whereby the voice itself causes both direct and alternating current, to be fed to a thermionic generator, the direct current, starting with the voice and stopping with the voice, causes continuous waves to be generated while the alternating current causes the amplitude of these waves to be varied.

Preferably there is connected to the generator a large condenser connected through a rectifier to a transformer in the microphone circuit so that any vibrations of the current in this circuit give the condenser a charge which leaks rapidly away when the vibrations cease. The microphone is also connected to the primary of another transformer, usually in series with the large condenser and with a smaller one which forms part of the oscillatory circuit.

This invention is illustrated by the accompanying drawing which shows it as applied to wireless telephony.

In figure 1 M is a microphone connected in series with a battery B and the primaries of two transformers T1 and T2. The secondary of T1 is connected through a

rectifying valve R to a condenser C one side of which is connected to the filament of a thermionic generator V while the other side is connected through the secondary of T2 to the anode of the generator V connected to an aerial A. It will be seen that since there is no source of potential such as the usual battery in the anode filament circuit of V there will be no generation of oscillations by V until speech is commenced when direct current will be fed to the anode filament circuit from the charge in condenser C, due to the transformer T1 and the rectifier R. The valve will then generate continuous waves the amplitude of which will be varied according to the speech by the alternating currents fed to the valve by the transformer T2 and the envelope of the oscillations will correspond to the alternating current wave and the speech will be reproduced at the receiving end without distortion.

If the windings of T1 and T2 are such that a fairly large part of the energy goes to the production of the direct current and only a smaller part to the production of the alternating current, a rapid rise of direct current potential is obtained on the condenser as soon as speech starts.

In order, however, to prevent this potential from rising to more than a definite value, a limiting device may be employed which by limiting the potential on C speeds up the dying away when the speech stops, as shown in figure 2, where rectifier valve R1 and battery B1 represent the limiting device.

In this arrangement also is shown the alternating current produced by the voice as acting on the grid of

the generating valve V and the resulting oscillations are then magnified by the valve circuit V2 to the antenna A.

These two diagrams are shown merely as illustrations of the invention which is not limited to these circuits in particular.

The continuous waves may be varied by the voice in any of the well known methods.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:-

1. In a telephone transmitter, the combination with a thermionic generator of means whereby the voice causes direct current to be supplied to the generator through the agency of a rectifier.

2. In a telephone transmitter, the combination with a thermionic generator of means whereby the voice causes direct current to be supplied to the generator through the agency of a rectifier and means for varying the generated high frequency current by the voice simultaneously.

3. In a telephone transmitter having the features covered by claims 1 and 2, the employment of a limiting valve in order to reduce the duration of the time during which transient conditions obtain.

4. Telephone transmitters substantially as described.

Dated this 10th February 1920

The Common Seal of Marconi's Wireless Telegraph Company Limited was hereto affixed in the presence of

Directors.

Secretary.

Fig. 1.

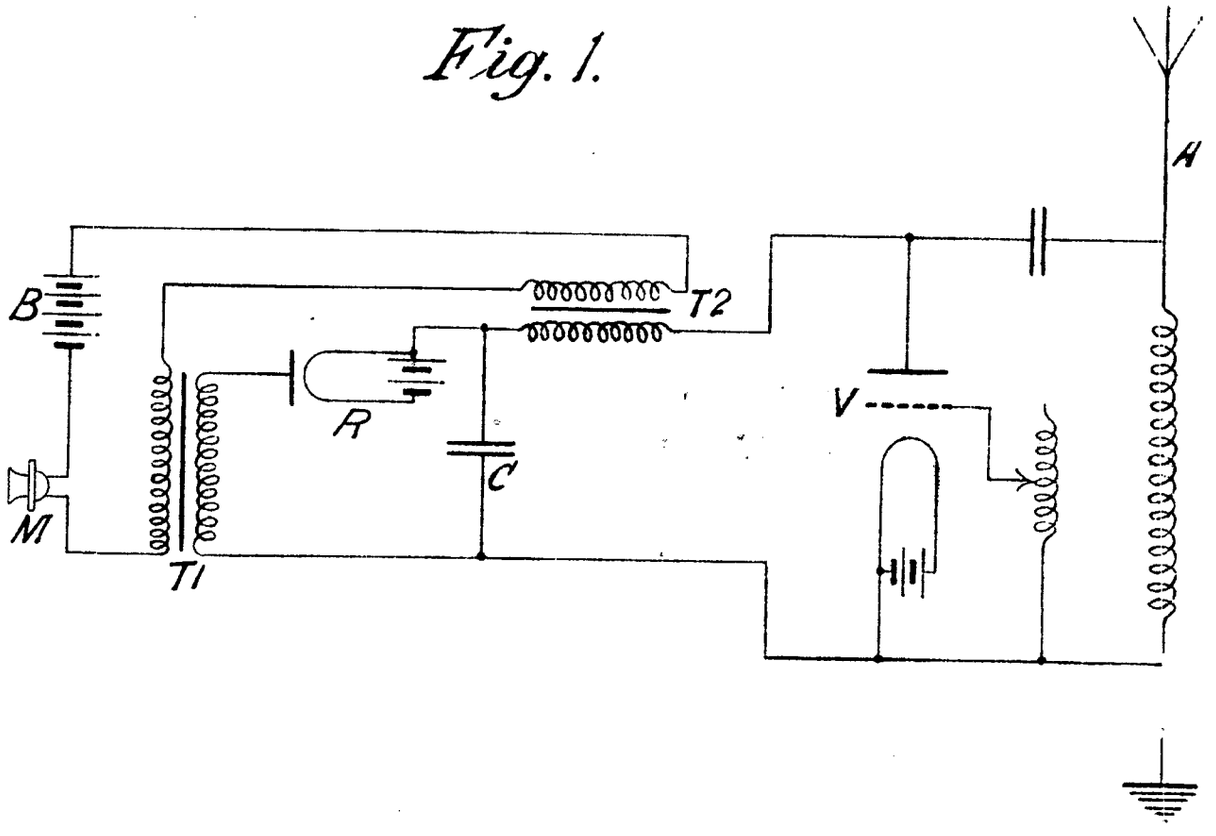
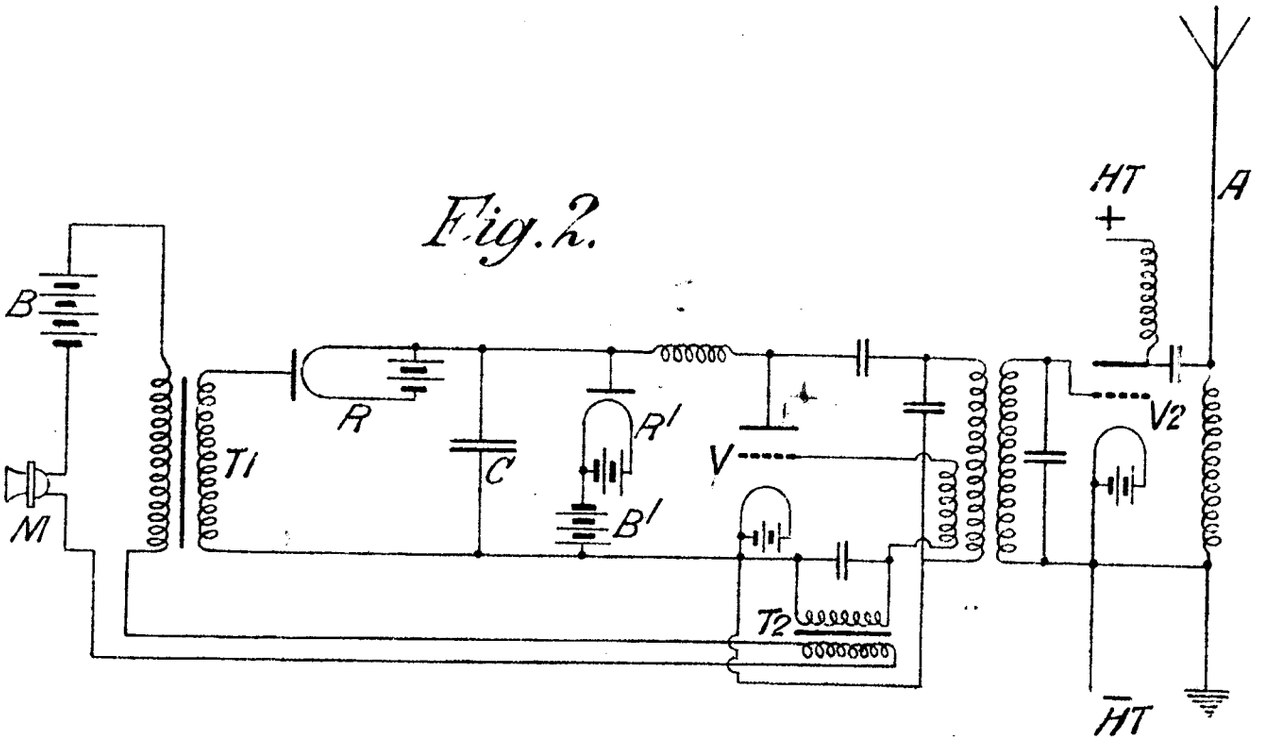


Fig. 2.



COUPON. The remitter may write here any communication to the payee.

Rs. 30 As. "

re Marconi's Wireless Tel. Co. Ltd.
No. 34/19-20 dy —
(Bill No. 10532/19 dy 25/4/19)
See our letter dy 12/8/20

Remitter.
18/8/20.

Rs. 23/8/20 do not Remit
23/8

191

From

Secretary to the Government of
His Highness the Maharaja of Mysu

To

Dated . .

Despatched

Received .

General No.

No.

Enclosure No.

2 copies. 3 Rupees

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

GENERAL AND REVENUE SECRETARIAT

No. 4753 for 199-19-11

Bangalore, Dated 30/8/1920

NOTIFICATION.

(PATENT)

The following specification of an invention has been filed in accordance with Sections 8, 9, 10 and 11 of Regulation XI of 1894 (The inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the Chief Secretary to the Government of His Highness the Maharaja of Mysore, and on payment of a fee of one Rupee.

By The Marconi's Wireless Telegraph Company Limited Electrical Engineers, of Marconi House, Strand, London, England, Assignees of Mr. Henry Joseph Round, Electrical Engineer, of 9, Woodberry Crescent, Muswell Hill, London, England

". Improvements in transmitters for Telephony

By Order,

24/8/20.

For *Chief Secretary to Government.*

24/8/20

To

The Compiler, Mysore Gazette, for publication.

G. R. S. VI—s-v/18 2446 **DRAFT.** 1895

SUBJECT.....

.....

.....

No.

Section. Jm
File No. 1995
Serial No. 12

Diary No. of letter replied to 2446

GENERAL AND REVENUE SECRETARIAT
( )
, *the*.....*191*

Date of issue 30/8

Signed by M Dey

94754(2)

To

Messrs Remfrey and Son.

Calcutta.

.....

Sir, Gentlemen

With reference to your letter dated 17-8-1920 I am directed to forward copy of a Notification No. 94753 dated 30/8/20 issued by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.)

The order granting permission to file specification is herewith returned, with the certificate at foot, duly filled in and signed.

~~I have, etc.~~, Yours faith

24/8/20

for Chief *Secretary to Government.*

24/8/20

G. R. S. VI.—s-v/12]

DRAFT. 3 drafts

SUBJECT.....

.....

.....

Gw Section.
File No. 199-19
Serial No. 13

Diary No. of letter replied to 2946

No. G 4755-7

mt to Each

GENERAL AND REVENUE SECRETARIAT,

( )

, *the*.....191

(1) *The Superintendent, Govt. Museum.*
(2) *The Chief Engineer of Mysore.*
(3) Secy to the Board for Chemical and Industrial Research and Scientific Service.

30/8

Date of issue.....

Has the honor to forward herewith

M^r Dcg

Signed by.....

or record in his office copy of a specification of an invention for "Improvements in transmitters for Telephony" by the Marconi's wireless Telegraph Ltd. Electrical Engineers of Marconi House, Strand, London England, Assignee of Mr. Henry Joseph Round, Electrical Engineer of 9, Woodberry Crescent, Muswell Hill, London.

By Order,

Dcg
24/8/20

for Chief Secretary to Government.

23.8.20 Dcg

24

261 i

Fm ~~GR 20 - 3~~ fm. 199-19-14

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.

1. No. 289
2. Date of Remittance 28 August 1920
3. From whom received Messrs Remfry & Sons Calcutta
4. Date of receipt of amount in the General and Revenue Secretariat 28-8-20
5. On what account Telegrafs for 8nw no 369 ~~11 Nov~~ 5 marconis inclo Telegraph Co London
6. Amount (in figures and words) Rs 39/- Rupees Thirty only
7. The head to which it should be credited.

(To be filled in by the Treasury.)

Subbaraiyappa

Secretary to Government,
~~*General Department.*~~

The above amount has been duly received and credited in the Treasury on this date.

28-8-20

Treasurer. *Try. Officer.*

Counterfoil and the duplicate to be returned to the General and Revenue Secretariat for the Treasury Department.